

**REMARKS**

Upon entry of the instant Amendment, claims 1-26 will be pending in the application. Claims 1, 17, 21 and 25 are independent. Reconsideration of the rejections in view of the above amendments and the following remarks is respectfully requested.

***35 U.S.C. § 112 Rejection***

Claim 2 was rejected under 35 U.S.C. § 112, second paragraph, for being allegedly indefinite.

The Examiner explains that it is not clear whether "the mail objects are being loaded into a bucket assembly or a container which is supported by a bucket assembly."

Applicants submits that one having ordinary skill in the art having read the specification (in particular paragraphs [0026] and [0027] of the instant US patent application publication No. 2004/0265101) would clearly recognize that the bucket assembly has the ability (via sensors 120A) to detect whether any number or type of containers are properly positioned in the bucket assembly and also has the ability to determine filling capacity (via e.g., sensors 120C) of both the bucket assembly and a container positioned in the bucket assembly.

Indeed, claim 2 recites the feature that the sensor 120A detects whether any number or type of containers are properly positioned in the bucket assembly. This feature is clearly disclosed on lines 6-10 of paragraph [0026] of the instant US patent application publication No. 2004/0265101.

The Examiner expresses concern that the sensors of the bucket assembly cannot be capable of determining the fill capacity of a container arranged within the bucket assembly. Applicants submits that one having ordinary skill in the art having read the specification and drawings would clearly recognize the various ways that this can occur. For example, it is well known to make the containers of a transparent plastic or with handles which are openings in the sides of the containers; both configurations allows the sensors to determine a fill capacity of the container. A container made of a transparent or translucent material is shown in Fig. 7 of the instant application. It is also possible to place the sensors at a height of a container in order to determine fill capacity of the container.

Thus, Applicants submits that the claims are entirely clear and definite and the Examiner has not shown otherwise.

Accordingly, Applicants respectfully submit that the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

### **35 U.S.C. § 102 Rejection**

Claims 1, 3-17, 19-22 and 24-26 were rejected under 35 U.S.C. § 102(b) for being allegedly anticipated by U.S. Patent No. 4,875,327 to WILDE. This rejection is respectfully traversed.

In order to establish a *prima facie* case of anticipation under 35 U.S.C. § 102, a single prior art reference must disclose each and every element as set forth in the subject claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2

USPQ 2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit that a *prima facie* case of anticipation cannot be established because WILDE fails to teach each and every element of the claims.

More particularly, independent claim 1 recites, *inter alia*,

at least one sensor which detects whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position.

Additionally, independent claim 17 recites, *inter alia*,

at least one sensor which detects whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the another tilt position.

Furthermore, independent claim 21 recites, *inter alia*,

detecting when the container is full at the first tilt position;  
indexing the container to an intermediate tilt position to enable settling of contents within the container; and  
detecting when the container is full at the intermediate tilt position.

Finally, independent claim 25 recites, *inter alia*,

a module which detects when a container is full at a first tilt position, an intermediate tilt position and an upright position;  
a module which detects a position of the container; and  
a module which controls a movement of the container based at least on a capacity of the container.

Applicants submit that WILDE does not disclose or even suggest any one or more of these features. Applicants acknowledge, for example, that WILDE teaches a container filling apparatus which utilizes a container support 14 and container that can be loaded with parts (see col. 6, lines 33-52). Applicants also acknowledge that WILDE discloses the use of a sensor 130 and limit switches 156 and 158 (see col. 6, lines 8-

32). However, Applicants respectfully submit that, contrary to the Examiner's assertions, the sensors 130 and 156 do not detect whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position, for example.

To the contrary, col. 5, lines 45-50 of WILDE discloses that the sensor 130 is "[a] parts back-up sensor" which is "located on discharge section 18". The disclosed sensor 130 merely detects "the back-up of parts at the discharge end 75." This is not a fill capacity sensor, as recited in the claimed invention. Also, the Examiner has not explained how such a back-up sensor, which is not even arranged on the container support 14, is capable of detecting whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and/or the full tilt position and/or detecting when the container is full at the first tilt position in combination with indexing the container to an intermediate tilt position to enable settling of contents within the container and detecting when the container is full at the intermediate tilt position.

Furthermore, col. 6, lines 8-32 of WILDE discloses that the so-called sensor 156 is in fact merely an "[a]djustable limit switch" which, when contacted, shuts down the conveyor and lowers the conveyor support 14 "to a fully lower position (FIG. 3)." The Examiner has not explained how such a limit switch, which is not even arranged on the container support 14, is capable of detecting whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position and/or detecting when the container is full at the first tilt position in combination

with indexing the container to an intermediate tilt position to enable settling of contents within the container and detecting when the container is full at the intermediate tilt position.

Clearly, the disclosed sensors do not control the movement of the container based at least on a capacity of the container or bucket assembly. Applicants note that the Examiner has failed to identify any language in WILDE which discloses or suggests anyone of more of the above-noted recited features.

The Examiner is respectfully directed to col. 6, line 33 to col. 7, line 26 of WILDE, which discloses the following:

In operation, container support 14 is in a lowered condition (FIG. 3) without a container 22 loaded onto container support floor 50. An empty container 22 is loaded onto container support 14 by a fork lift truck or other container handling equipment. The operator raises container support 14 through cylinder 66 until container support 14 is in the fully raised condition shown in FIG. 2. In this fully raised condition, container support floor 50 forms an angle "A" (FIG. 2) with the horizontal. Most preferably angle "A" is approximately seventy degrees, so that back wall 52 forms a twenty degree angle with a horizontal line. The raising of conveyor support 14 releases discharge section 18 to pivot downwardly due to gravitational forces. Discharge end 75 is most preferably spaced at most approximately six inches above the back wall of container 22 located below discharge end 75.

Conveyor 16 is activated, causing parts to be conveyed onto discharge section 18 and then discharged into container 22. Preferably, the greatest drop from discharge end 75 is that which occurs at the start of the fill cycle, which is at most about six inches down to the contact surface of the container. The parts drop into container 22 and commence piling up until sensor 130 determines a parts back-up at discharge end 75 that is sustained for the preselected time interval. In response to sensor 130, cylinder 66 pivots container support 14 downwardly until sensor 130 is cleared. Parts continue to be conveyed to container 22, with the result that through the majority of the fill cycle parts are pushed off of discharge end 75 onto the accumulated pile with little or no drop from discharge end 75 onto the contact surface of the pile. Through an initial filling phase of the filling cycle, container support 14 pivots downwardly without change in elevation of

conveyor discharge end 75. Parts accumulate within container 22 after little or no fall from discharge end, with the maximum fall preferably being approximately six inches from discharge end 75.

When container support 14 is pivoted downwardly to an angle "A" of approximately ten degrees from the horizontal, which occurs approximately eighty percent through the filling cycle, pin 108 of joining bracket 104 is slid to the end of slotted bracket 94 (FIG. 6). At this point slotted bracket 94 pivotally engages joining bracket 104 so that further lowering of container support 14 pivots joining bracket 104 in a counterclockwise direction as shown in FIGS. 4-7. The continued staged lowering of container support 14 in response to sensor 130 thus raises conveyor bracket 110, causing conveyor discharge section 18 to pivot upwardly simultaneous with the lowering of container support 14. This provides conveyor 16 with the ability to completely fill container 22. Most preferably discharge end 75 is not spaced more than approximately six inches above the top of parts accumulated within container 22 at any stage of the fill cycle, with there being little or no spacing in the later stages of the fill cycle. A fork lift or other material handling equipment is used to pick container 22 off of container support 14 after container 22 has been completely filled any thereafter replaced by an empty container 22.

It is clear from such language that the initial movement of the container support 14 is controlled by an operator. Thereafter, the filling takes place under the influence of the back-up sensor which detects back-up of the parts on the discharge end 75 of a discharge section 18. Such language is hardly suggestive of detecting when a container or bucket assembly is full at each of a first tilt position, an intermediate tilt position and an upright position, or of a module which detects a position of the container, or even of a module which controls a movement of the container based at least on a capacity of the container.

Accordingly, Applicants respectfully submit that independent claims 1, 17, 21 and 25 as well dependent claims 3-16, 19, 20, 22, 24 and 26, which depends from claims 1,

17, 21 and 25 are allowable. Thus, Applicants respectfully submit that the rejection under 35 U.S.C. § 102(b) should be withdrawn.

### **35 U.S.C. § 103 Rejections**

Claims 2, 18 and 23 were rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over WILDE in view of U.S. Patent No. 5,797,716 to HERRIN. This rejection is respectfully traversed.

The Examiner acknowledges that WILDE lacks, among other things, the recited sensor of claims 2, 18 and 23. However, the Examiner explains that such a sensor is taught by HERRIN and that it would have been obvious to combine the teachings of these documents. Applicants respectfully submit that a *prima facie* case of obviousness has not been established as the applied references fail to teach each and every element of the claims.

Applicants submit that neither WILDE nor HERRIN disclose or suggest the combination of features recited in at least independent claims 1, 17 and 21. Applicants also submit that no proper combination of these documents disclose or suggest the combination of features recited in at least claims 1, 17 and 21.

As explained above, the sensors 130 and 156 do not detect whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position. To the contrary, col. 5, lines 45-50 of WILDE discloses that the sensor 130 is "[a] parts back-up sensor" which is "located on discharge section 18". The disclosed sensor 130 merely detects "the back-up of parts at the discharge

end 75.” Also, the Examiner has not explained how such a back-up sensor, which is not even arranged on the container support 14, is capable of providing the features recited in claims 1, 17 and 21.

HERRIN does not cure the deficiencies of WILDE. While the Examiner has identified sensors 66 and 67 of HERRIN as the sensor of claims 2, 18 and 23, the Examiner has clearly failed to appreciate the fact that the claims recite a sensor which determines whether any variable sized mail holding container is properly positioned within the bucket assembly. Sensors 66 and 67 of HERRIN, in contrast, merely sense “the entering and exiting of containers C” through “the container holder” (see col. 6, lines 56-60). This is not the same as sensing a container size. Also, the Examiner has not explained how the disclosed sensors 66 and 67 can possibly determine whether any variable sized mail holding container is properly positioned within the bucket assembly. Furthermore, Applicants submit that none of the disclosed sensors (including sensors 66 and 67) of HERRIN have been shown by the Examiner to be capable of detecting whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position.

Moreover, in addition to failing to disclose the combination of features recited in the above-noted claims 1, 17 and 21, Applicants submit no proper combination of these documents discloses or suggests the combination of features recited in claims 1, 17 and 21 or in the above-noted claims which depend from claims 2, 18 and 23.

Applicants note, in particular, that no proper combination of WILDE and HERRIN discloses or suggests:




- (i) further comprising a sensor determining whether any variable sized mail holding container is properly positioned within the bucket assembly (claim 2).
- (ii) further comprising a sensor determining whether the container is properly positioned within the bucket assembly;  
a safety sensor associated with the actuator system ensuring shut down of the actuator system based on a detected problem;  
at least an additional sensor to detect at least one of an upright and down position of the bucket assembly; and  
a chute sensor located proximate to the chute which detects package backlog on the chute (claim 18).
- (iii) further comprising the step of detecting whether the container is properly positioned prior to loading the container with the content (claim 23).

Accordingly, Applicants respectfully submit that the above-noted rejection under 35 U.S.C. § 103(a) should be withdrawn.

### CONCLUSION

In view of the foregoing remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned listed below, if needed.

Respectfully submitted,  
W. BLACKWELL, *et al.*



Andrew M. Calderon  
Reg. No. 38,093

August 15, 2006  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
703-716-1191